REMARKS

Claims 1 to 10 are all the claims pending in the application, prior to the present Amendment.

Claim 8 has been rejected under the second paragraph of 35 U.S.C. § 112 as indefinite.

The Examiner states that it is unclear how the term "general" limits the depicted formula.

While applicants disagree with this rejection, applicants have amended claim 8 by deleting the term "general." Applicants request withdrawal of this rejection in view of this amendment.

Claims 1 to 10 have been rejected under 35 U.S.C. § 103(a) as obvious over JP 2001-348566.

Applicants submit that JP '566 does not disclose or render obvious the subject matter of the presently claimed invention.

The Examiner particularly refers to the Examples in Tables 1 to 3 of JP '566, and the claims as being of particular interest.

Applicants have obtained a computer translation of JP '566. In addition, JP '566 corresponds, at least in part, to EP 1 281 727. Table 3 of EP '727 corresponds to Tables 1 to 3 of JP '566. Applicants are filing concurrently herewith an Information Disclosure Statement with copies of these documents.

The present invention as set forth in claim 1 as amended above is directed to a thermosetting resin composition comprising: a polyimide resin component (A) containing at least one polyimide resin; an amine component (B) containing at least one amine; an epoxy resin

component (C) containing at least one epoxy resin; and an imidazole component (D) containing at least one imidazole, and wherein the thermosetting resin composition is in a semi-cured state and has a minimum melt viscosity in the range of 100 poise to 50,000 poise in the temperature range of 60°C to 200°C.

Thus, applicants have amended claim 1 to incorporate the subject matter of claim 5. Applicants have canceled claim 5.

A thermosetting resin composition of the present invention is not only capable of providing a cured product with low dielectric constant and dielectric tangent in a GHz band, but also is capable of having an adequate degree of flowablility in a semi-cured state when heated. Thanks to such flowability, the gap between circuit wirings can be filled with the resin (the thermosetting resin composition) when it is laminated on the circuit.

As described in the second paragraph on page 61 in the specification, the composition in the form of sheet in semi-cured state is preferably laminated in the range of 60 to 200°C. The specific combination of (A) a polyimide resin component, (B) an amine component, (C) an epoxy resin component, and (D) an imidazole component enables the composition to have flowability to embed the circuit in the above temperature range which corresponds to the actual thermal lamination temperature. Original claim 5 expresses the feature of this invention more clearly. Therefore, applicants have amended claim 1 to contain the recitations of claim 5.

That is, the specific combination set forth in the present claims gives the composition a minimum melt viscosity in the range of 100 poise to 50000 poise in the temperature range of 60 to 200°C in the semi-cured state. On the contrary, JP '556 does not disclose such a semi-cured state composition. Therefore, applicants submit that the composition of claim 1, which is in a

semi-cured state and has a specific minimum melt viscosity in a specific range, is not disclosed or suggested by JP '556.

JP '556 is silent about the minimum melt viscosity of the semi-cured composition. JP '556 discloses a composition comprising (A) a polyimide resin component and (C) an epoxy resin component in its claim 1. However, regarding (B) an amine component or (D) an imidazole component, these components are just described in the broad disclosure of JP '566 as an example of a curing agent or a curing accelerator. JP '556 does not disclose a specific combination of these components explicitly and the amount of these components.

An epoxy resin generally starts to be cured simultaneously with melting. Therefore, it is common knowledge that an epoxy resin composition would not have such a low melt viscosity as the present composition. When an epoxy resin composition is combined with a polyimide resin, the melt viscosity further increases, because an amino-group or acid anhydride group in the terminal of the polyimide resin accelerates to cure the composition.

On the contrary, the present inventors found a specific combination that exceptionally shows a low melt viscosity in the temperature of lamination. Applicants submit that one of ordinary skill in the art would not have been led to select two components from a curing agent or a curing accelerator for the epoxy resin, especially when the epoxy resin is used with a polyimide resin. It is required that both two components are adequately selected in terms of a compatibility with the polyimide resin.

Starting from JP '556, which is silent about flowability and dielectric characteristics, in order to arrive at the present invention, it would have been necessary to select the specific combination, confirm its melt viscosity in semi-cured state and confirm the dielectric viscosity of the cured product to achieve the present invention. Applicants submit that such a course of

action could only be achieved by hindsight reasoning and that the present invention is not obvious.

In view of the above, applicants submit that JP '566 does not disclose or render obvious the subject matter of the presently claimed and, accordingly, request withdrawal of this rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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23373
CUSTOMER NUMBER

Date: October 2, 2009